



PTO/SB/08A (08-03)

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/618,043
		Filing Date	July 11, 2003
		First Named Inventor	Serati, Steve
		Art Unit	2873
		Examiner Name	Not yet known JACK DINH
Sheet 1	of 3	Attorney Docket Number	040131-000100US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
J.P.	A1	US-5,059,008	10-22-1991	Flood et al.	
J.P.	A2	US-5,825,523	10-20-1998	Amital	
J.P.	A3	US-6,480,334	11-12-2002	Fam	

Examiner Signature		Date Considered	09/20/04
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JD	C1	A.F. FRAY and D. JONES "Large-angle beam deflector using liquid crystals," Electron. Lett.; August 1975, pp. 358-359, Vol. 15, No. 16.	
	C2	J.U. WHITE "Very long optical paths in air," Journal of the Optical Society of America, May 1976, pp. 411-416, Vol. 66, No. 5.	
	C3	A. SASAKI AND T. ISHIBASHI, "Liquid-crystal light deflector," Electron. Lett., March 1979, pp. 293-294, Vol. 15, No. 10.	
	C4	W. GOLTSOS AND M. HOLTZ, "Agile beam steering using binary optics microlens arrays," Opt. Eng., Nov. 1990, pp. 1392-1397, vol. 11, no. 29.	
	C5	P. F. MCMANAMON, E. A. WATSON, T. A. DORSCHNER, AND L. J. BARNES, "Applications look at the use of liquid crystal writable gratings for steering passive radiation," Opt. Eng., Nov 1993, pp. 2657-2664, Vol. 32, No. 11.	
	C6	E. A. WATSON AND L. J. BARNES, "Optical design considerations for agile beam steering," SPIE Vol. 2120 Laser Beam Propagation and Control (1994), pp. 186-193.	
	C7	E. A. WATSON, P. F. MCMANAMON, L. J. BARNES, AND A. J. CARNEY, "Applications of dynamic gratings to broad spectral band beam steering," SPIE Vol. 2120 Laser Beam Propagation and Control (1994), pp. 178-185.	
	C8	R. M. MATIC, "Blazed phase liquid crystal beam steering," SPIE Vol. 2120 Laser Beam Propagation and Control (1994), pp. 194-205.	
	C9	B. L. ANDERSON, S. A. COLLINS, C. A. KLEIN, E. A. BEECHER AND S. B. BROWN, "Highly parallel optical true time delay device for phased array antennas," Proceedings of The Sixth Annual ARPA Symposium on Photonic Systems for Antenna Applications, Monterey CA. (March 7, 1996)	
	C10	P. F. MCMANAMON, ET. AL., "Optical Phased Array Technology," Proceedings of the IEEE, Feb 1996, pp. 268-298, Vol. 84, No. 2.	
	C11	L. J. FRIEDMAN, D. S. HOBBS, S. LIEBERMAN, D. L. CORKUM, H. Q. NGUYEN, D. P. RESLER, R. C. SHARP, AND T. A. DORSCHNER, "Spatially resolved phase imaging of a programmable liquid-crystal grating," Applied Optics, Nov. 1996, pp. 6236-6240, Vol. 35, No. 31.	
	C12	S. SERATI AND J. STOCKLEY, "Advanced Liquid Crystal on Silicon Optical Phase Arrays," 2002 IEEE Aerospace Conference - Paper 5.0301 (2002).	
	C13	P. F. MCMANAMON AND W. THOMPSON, "PAPA Array of Phased Arrays (PAPA) Laser Systems Architecture," 2002 IEEE Aerospace Conference - Paper 5.0601 (2002).	
	C14	E. A. WATSON AND L. J. BARNES, "Implementing Optical Phased Array Beam Steering with Cascaded Microlens Arrays," 2002 IEEE Aerospace Conference - Paper 5.0306 (2002).	
	C15	J. STIGWALL, "Optimization of a Spatial Light Modulator for Beam Steering and Tracking Applications," Thesis - Department of Physics and Measurement Technology, Linköping University (2002)	

Examiner Signature	<i>Serati</i>	Date Considered	04/20/04
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	C16	J. STOCKLEY AND S. SERATI, "Cascaded One-dimensional Liquid Crystal OPAs for Beam Steering in Two Dimensions," 2003 IEEE Aerospace Conference - Paper 5.0701 (2003).	
	C17	E. J. HAELLSTIG, J. STIGWALL, M. LINDGREN AND L. J. SJOQVIST, "Laser beam steering and tracking using a liquid crystal spatial light modulator," Proceedings of SPIE Vol. 5087 Laser Systems Technology (2003).	
	C18	S. R. HARRIS, "Numerical optimization of the performance of nematic liquid crystal optical phased arrays," Proceedings of SPIE Vol. 5162 Advanced Wavefront Control: Methods, Devices, and Applications (2003).	
	C19	S. R. HARRIS, "Polarization effects in nematic liquid crystal optical phased arrays," Proceedings of SPIE Vol. 5213 Liquid Crystals VII (2003).	

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